



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,446	10/24/2003	D. Amnon Silverstein	10982103-4	2891

7590 03/29/2007
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

SELBY, GEVELL V

ART UNIT	PAPER NUMBER
----------	--------------

2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/693,446	Applicant(s) SILVERSTEIN, D. AMNON	
	Examiner Gevell Selby	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 16-18 and 21 are rejected under 35 U.S.C. 102(a) as being anticipated by Chen, US 6,552,744.**

In regard to claim 16, Chen, US 6,552,744, discloses a process for a camera having a display, the process comprising the steps of:

displaying a first portion of an image on the display (see column 3, lines 44-48);
moving the camera (see column 3, lines 44-48);
sensing motion of the camera (see column 3, lines 48-53); and
based on the motion, displaying a second portion of the image on the display (see column 3, lines 48-53).

In regard to claim 17, Chen, US 6,552,744, discloses the process as set forth in claim 16, wherein the image is a panoramic image (see column 3, lines 37-43).

In regard to claim 18, Chen, US 6,552,744, discloses the process as set forth in claim 16, wherein the image has a resolution greater than the display (see figure 2 and column 3, lines 37-53 and column 4, lines 35-45).

Art Unit: 2622

In regard to claim 21, Chen, US 6,552,744, discloses a camera having a display, the camera comprising:

a motion sensor (see figure 1, element 21) to sense motion of the camera (see column 3, lines 28-32); and

circuitry (see figure 1, element 19) to displaying a first portion of an image on the display, and if motion of the camera is sensed (see column 3, lines 44-48), based on the motion, the circuitry displaying a second portion of the image on the display (see column 3, lines 48-53).

3. Claim 11, 12, 15, 19, 20, 22, 24, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakaegi, US 5,808,678.

In regard to claims 11 and 20, Sakaegi, US 5,808,678, discloses a camera having a display and a process for a camera having a display, comprising:

a motion sensor to sense motion of the camera (see figure 1, element 6 and column 4, lines 23-33);

a selector (see figure 1, element 23);

circuitry configured to display a cursor (see figure 7B, element 203) and a first portion of a scene on the display (see column 6, lines 57-59);

the selector using the cursor to select a first location within the first portion (see column 6, lines 44-59);

moving the camera to display a second portion of a scene on the display (see column 6, lines 59-61);

sensing motion of the camera (see column 4, lines 27-32 and column 6, lines 59-61);

displaying the cursor based on the motion (see column 6, lines 61-63); and

using the cursor to select a second location within the second portion such that the first and second locations define a region (see figure 7C, element 701) of the scene (see column 6, lines 61-67), wherein it is inherent the Sakaegi reference discloses that the region being of greater extent than is displayed in the display, when the camera is displaced a distance more than half length of the display when the zoom area designation SW 23 is pressed.

In regard to claim 12, Sakaegi, US 5,808,678, discloses the process as set forth in claim 11, wherein an operation is performed on the region (see column 6, lines 63-67).

In regard to claim 15, Sakaegi, US 5,808,678, discloses the process as set forth in claim 12, wherein the operation includes the step of zooming the camera to display the region in the display (see column 6, lines 63-67).

In regard to claim 19, Sakaegi, US 5,808,678, discloses the camera having a display, the camera comprising:

a motion sensor (see figure 1, element 6) to sense motion of the camera;

circuitry (see figure 1, element 7) to display a cursor and a plurality of icons on the display, based on the motion (see column 7, lines 13-15), the circuitry repositioning the icons in the display until the cursor is on a target icon of the plurality of icons (see column 7, lines 21-29); and

a selector (see figure 1, element SW 24) to select the target icon (see column 7, lines 21-23).

In regard to claim 22, Sakaegi, US 5,808,678, discloses the process of claim 11, wherein the sensing comprises determining magnitude and direction of motion of the camera (see column 4, lines 24-27: calculates motion vector), and displaying comprising moving the cursor on the display based on the determined magnitude and direction (see column 6, lines 54-67).

In regard to claim 24, Sakaegi, US 5,808,678, discloses the process as set forth in claim 11. The Sakaegi reference does not disclose wherein the sensing comprises tracking motion of the camera (see column 6, lines 59-67).

In regard to claim 28, Sakaegi, US 5,808,678, discloses the process of claim 12, wherein the operation comprises capturing an image of the defined region of the scene with a compression level specified for the defined region (see figure 7D).

In regard to claim 29, Sakaegi, US 5,808,678, discloses the process of claim 15, wherein the zooming is controlled based on the first (see figure 7c, element 201) and second (see figure 7c, element 203) selected locations defining the region of the scene (see column 6, lines 45-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2622

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 30-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen, US 6,552,744, in view of Sato, US 6,515,704.

In regard to claims 30, 34, and 37 Chen, US 6,552,744, discloses a process for a camera having a display and a camera, the comprising:

a display (see figure 1, element 27);

a motion sensor (see figure 1, element 21) configured to sense motion corresponding to motion of the display (see column 3, lines 28-37);

circuitry (see figure 1, element 19) configured to interpret the sensed motion as a user interface input (see column 3, lines 44-48).

The Chen reference does not disclose wherein the display is a see-through display, wherein a virtual image is displayable over a scene viewed through the see-through display and presenting on the display images superimposed on a scene viewed through the camera in accordance with the interpreted user interface input, wherein the presenting comprises simultaneously presenting on the display a virtual image that includes a sheet of thumbnail images superimposed on an image of a scene viewed through the camera.

Sato, US 6,515,704, discloses an image sensing apparatus and display (see figure 4, element 100) wherein the display is a see-through display, wherein a virtual image is displayable over a scene viewed through the see-through display (see column 4, lines 59-63) and presenting on the display images (see figure 4 elements 102-113) superimposed on a scene viewed through the camera in accordance with the interpreted user interface

input (see figure 4, element 101), wherein the presenting comprises simultaneously presenting on the display a virtual image that includes a sheet of thumbnail images superimposed on an image of a scene viewed through the camera (see abstract and column 4, line 32 to column 5, line 9).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Chen, US 6,552,744, in view of Sato, US 6,515,704, wherein the display is a see-through display, wherein a virtual image is displayable over a scene viewed through the see-through display and to present on the display images superimposed on a scene viewed through the camera in accordance with the interpreted user interface input, wherein the presenting comprises simultaneously presenting on the display a virtual image that includes a sheet of thumbnail images superimposed on an image of a scene viewed through the camera, in order that the preview image for photographing and thumbnail image for viewing can be simultaneously displayed on the same screen, thus the visibility and operability in the camera can be largely improved.

In regard to claims 31 and 35, Chen, US 6,552,744, in view of Sato, US 6,515,704, discloses the process and camera of claims 30 and 34, respectively. The Chen reference discloses wherein the circuitry is configured to determine a viewpoint for displaying a region of a given image on the display based on the sensed motion of the camera (see column 3, lines 48-52).

In regard to claims 32 and 36, Chen, US 6,552,744, in view of Sato, US 6,515,704, discloses the process and camera of claims 30 and 34, respectively. The Chen

Art Unit: 2622

reference discloses wherein the circuitry configured to track the motion of the camera (see column 3, lines 44-48).

In regard to claim 33, Chen, US 6,552,744, in view of Sato, US 6,515,704, discloses the process of claim 30. The Chen reference discloses further comprising automatically recording geometric location data with each picture captured (see column 4, lines 52-54). The Chen reference does not disclose automatically recording time of day with each picture captured by the camera.

Official Notice is taken that it is well known to one of ordinary skill in the art to automatically record time of day with each picture captured by the camera, in order to easily organize captured images by the image capture time.

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Chen, US 6,552,744, in view of Sato, US 6,515,704, to automatically record time of day with each picture captured by the camera, in order to easily organize captured images by the image capture time.

6. Claims 13, 14, 23, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaegi, US 5,808,678, in view of Chen US 6,552,744.

In regard to claim 13, Sakaegi, US 5,808,678, discloses the process as set forth in claim 12. The Sakaegi reference does not disclose wherein the operation includes the step of capturing a panoramic image having the extent of the region.

Chen US 6,552,744, discloses a camera for creating and viewing panoramic images, wherein images are viewed by rotating the camera in different directions to view different portions of the panoramic image (see column 3, lines 28-53).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Sakaegi, US 5,808,678, in view of Chen US 6,552,744, wherein the operation includes the step of capturing a panoramic image having the extent of the region, in order to capture, create and view a panoramic image larger than the size of the display on a camera without having to manipulate complicated control, providing use of operation.

In regard to claim 14, Sakaegi, US 5,808,678, in view of Chen US 6,552,744, discloses the process as set forth in claim 13. The Chen reference discloses wherein the step of capturing the panoramic image includes displaying an indicator on the display to guide movement of the camera (see column 4, lines 59-63, light).

In regard to claim 23, Sakaegi, US 5,808,678, discloses the process as set forth in claim 11. The Sakaegi reference does not disclose wherein the sensing comprises acquiring a sequence of images and comparing successive images in the sequence to determine parameters describing motion of the camera.

Chen US 6,552,744, discloses a camera for creating and viewing panoramic images, wherein the sensing comprises acquiring a sequence of images and comparing successive images in the sequence to determine parameters describing motion of the camera (see column 3, lines 28-53).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Sakaegi, US 5,808,678, in view of Chen US 6,552,744, wherein the sensing comprises acquiring a sequence of images and comparing successive images in the sequence to determine parameters describing motion of the

Art Unit: 2622

camera, in order to capture, create and view a panoramic image larger than the size of the display on a camera without having to manipulate complicated control, providing use of operation.

In regard to claim 25, Sakaegi, US 5,808,678, discloses the process of claim 24. The Sakaegi reference does not disclose wherein the tracking comprises tracking angular position of the camera in relation to a fixed coordinate system.

Chen US 6,552,744, discloses a camera for creating and viewing panoramic images, wherein the tracking comprises tracking angular position of the camera in relation to a fixed coordinate system (see column 3, lines 28-53).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Sakaegi, US 5,808,678, in view of Chen US 6,552,744, wherein the tracking comprises tracking angular position of the camera in relation to a fixed coordinate system, in order to capture, create and view a panoramic image larger than the size of the display on a camera without having to manipulate complicated control, providing use of operation.

In regard to claim 26, Sakaegi, US 5,808,678, discloses the process of claim 11. The Sakaegi reference does not disclose further comprising presenting different portions of a virtual panorama in the display based on the sensed motion of the camera.

Chen US 6,552,744, discloses a camera for creating and viewing panoramic images, further comprising presenting different portions of a virtual panorama in the display based on the sensed motion of the camera (see column 3, lines 28-53).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Sakaegi, US 5,808,678, in view of Chen US 6,552,744, further comprising presenting different portions of a virtual panorama in the display based on the sensed motion of the camera, in order to capture, create and view a panoramic image larger than the size of the display on a camera without having to manipulate complicated control, providing use of operation.

In regard to claim 27, Sakaegi, US 5,808,678, in view of Chen US 6,552,744, discloses the process of claim 26. The Chen reference discloses wherein the virtual panorama is composed of multiple tiled images captured by the camera (see figure 2 and column 3, lines 37-43)

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,977,675, discloses a display that moves the displayed image according to the movement of the device.

US 6,466,198, disclose a handheld device the moves and magnifies an image displayed on the device according to the rotation of the device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

Art Unit: 2622

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gvs


TUAN HO
PRIMARY EXAMINER